STATUS OF THE CLAIMS

1-63. (cancelled).

64. (New) A method for the toxicological examination of substances comprising:

a) providing:

i) a cell culture exhibiting cell-type specific or development-specific expression of a non-cell damaging fluorescent protein comprising embryonic stem cells stably transfected with a DNA construct comprising:

a DNA sequence coding for said non-cell damaging fluorescent protein, and

a promoter operably linked to said DNA sequence, said promoter selected from the group consisting of a cell-type dependent promoter, a development-dependent promoter and combinations thereof, wherein said promoter is activated after differentiation of said stem cells, and

ii) a test compound;

b) exposing said cell culture to said test compound;

c) assaying said cell culture for expression of said non-cell damaging fluorescent protein.

65. (new) The method of Claim 64, wherein said stem cells are rodent stem cells.

66. (new) The method of Claim 65, wherein said rodent stem cells are mouse stem cells.

67. (new) The method of Claim 64 wherein said non-cell damaging fluorescent protein is selected from the group consisting of Green Fluorescent Protein, Red Fluorescent Protein, and Blue Fluorescent Protein.

68. (new) The method of Claim 64, wherein said promoter is a promoter specific for heart cells, neurons, glia cells, hematopoietic cells, endothelial cells, smooth muscle cells, skeletal muscle cells, cartilage cells, fibroblasts and epithelial cells.

69. (new) The method of Claim 64, wherein said promoter is selected from Nkx-2.5, human alpha-actin, and MLC-2V promoters.

70. (new) The method of Claim 69, wherein said promoter is the heart-specific human alpha-actin promoter.

71. (new) The method of Claim 64, wherein said DNA construct comprises further functional elements.

72. (new) The method of Claim 71, wherein said further functional DNA elements are selected from the group consisting of enhancer elements, selectable marker genes, or combinations thereof.

73. (new) The method of Claim 64, wherein said DNA construct is the plasmid pCX-(α-act)GFP-Neo (DSM 11633).

74. (new) The method of Claim 64, wherein said stem cells are provided as an aggregate.

75. (new) The method of Claim 74, wherein said aggregate is obtained by the hanging drop method.

76. (new) A method for the toxicological examination of substances comprising:

a) providing:

i) a cell culture exhibiting cell-type specific or development-specific expression of a non-cell damaging fluorescent protein comprising an aggregate of embryonic stem cells stably transfected with a DNA construct comprising:

a DNA sequence coding for said non-cell damaging fluorescent protein, and

a promoter operably linked to said DNA sequence, said promoter selected from the group consisting of a cell-type dependent promoter, a development-dependent promoter and combinations thereof, wherein said promoter is activated after differentiation of said stem cells, and

ii) a test compound;

b) exposing said cell culture to said test compound;

c) assaying said cell culture for expression of said non-cell damaging fluorescent protein.

77. (new) A method for the toxicological examination of substances comprising:

a) providing:

i) a cell culture exhibiting cell-type specific or development-specific expression of a non-cell damaging fluorescent protein comprising an aggregate of embryonic stem cells stably transfected with a DNA construct comprising:

a DNA sequence coding for said non-cell damaging fluorescent protein, and

a promoter operably linked to said DNA sequence, said promoter promoter specific for expression in a differentiated cell type selected from the group consisting of heart cells, neurons, glia cells, hematopoietic cells, endothelial cells, smooth muscle cells, skeletal muscle cells, cartilage cells, fibroblasts and epithelial cells, and

ii) a test compound;

b) exposing said cell culture to said test compound;

c) assaying said cell culture for expression of said non-cell damaging fluorescent protein.